http://jrhc.miau.ac.ir

Report of Health Care **Original Article**
Volume 2, Issue 1, 2016, p. 1- 9

Assessment of the Effectiveness of Cognitive- Existence Realistic Group Therapy on Anxiety and Depression in Patients with Breast Cancer

Hamidreza Arman [*1], Noshirvan Khezri Moghadam [2]

1. Department of Student in Educational Psychology, Kerman Branch, Islamic Azad University, Kerman, Iran
2. Assistant Professor, Shahid Bahonar University of Kerman, Kerman, Iran

Received: 20 September 2015

Accepted: 21 November 2015

Published online: 1 February 2016

***Corresponding author:** Hamidreza Arman, Department of Student in Educational Psychology, Kerman Branch, Islamic Azad University, Kerman, Iran

Phone: +989131444600

Fax: +983433210051

Email: h.arman341@yahoo.com

Competing interests: The authors declare that no competing interests exist.

Citation: Arman H, Khezri Moghadam N. Assessment of the effectiveness of cognitive- existence realistic group therapy on anxiety and depression in patients with breast cancer. Report of Health Care. 2016; 2 (1): 1- 9.

Abstract

Introduction: Cancer is one of the most important health problems around the world today, and its prevalence is higher in industrialized countries. The purpose of this study was to evaluate the efficacy of cognitive-existence realistic group therapy on anxiety and depression in breast cancer patients.

Methods: The research design was of experimental type, having pre-test and post-test with two groups of experiments and control. The statistical population of this study consisted of women suffering from breast cancer, aging 18 to 60 years old in spring 2016 who referred to Afzali Hospital in Kerman to use therapeutic facilities (chemotherapy and radiotherapy). The sample group included 30 patients referring to the medical centers of Kerman who announced their readiness to attend the group therapy session after the introduction of the program. Sample groups consisted of 2 groups of 15 cancer patients (15 patients in the control group and 15 in the experimental group). Both groups responded to Beck Depression Inventory (1961) and Beck Anxiety Inventory (1988) before and after the experiment. Data were analyzed using statistical methods such as distribution table, frequency charts, mean and standard deviation, and covariance analysis ($p \leq 0.05$).

Results: The results showed that cognitive-ontological group therapy had an effect on the anxiety of patients with cancer at a significance level of ($p < 0.01$). Also, cognitive-ontological group therapy had a significant effect on depression in patients with cancer at a significant level of ($p < 0.01$).

Conclusion: Cognitive-existence realistic group therapy can reduce depression and anxiety in patients with breast cancer.

Keywords: Cognitive- Existence Realistic Therapy, Anxiety, Depression, Breast Cancer.

Introduction

Cancer is one of the most important health problems around the world today, and its prevalence is higher in industrialized countries. If the incidence of cancer increases in the same way, according to the UN estimates, 1 out of every 5 people may tolerate one of the cancer forms (1). The statistics of cancer cases in Iran follows the same rule. Cancer after cardiovascular diseases, is the second cause of death in the United States and the third leading cause of death in Iran (2). Cancer imposes changes, pressures, and various impacts in the life of the patient and his or her family. The response to cancer varies depending on the patient and their psychological structure, the family and social environment, disabilities and deformities

created, and can affect all levels of the patient's activities (3). The name of the cancer has always been accompanied by a message of horror and death. This illness is suffered by a lot of patients every day, which is why from the long time ago, discovery of the causes and ways of treating it are considered by researchers and medical scientists. In other words, although we consider cancer as a symbol of death and negation, we still have an eye on hope and expectance toward distant horizons to overcome this disease (4). Breast cancer is also the most common cancer that affects many women each year. Nowadays, due to the reduction in the mortality rate due to this type of cancer and the increase in the number of its young survivors, more research is needed on this disease and resulting psychological outcomes in young age groups. According to the National Cancer Institute (2012), between 1995 and 2009, 124.3 out of every 100000 women suffered breast cancer (5). According to the International Cancer Research Report (2012), in 2008, breast cancer was the most common type among Iranian women, and its five-year prevalence in our country was 56.5 per 1000, also the highest incidence of this disease are reported in the ages of 35- 40, which is 10 years lower than those reported in other countries. The mental problems of women with breast cancer are serious ones. Surgery and auxiliary treatments, fatigue, pain, early menopause, age below 65 years, and previous history of depression, make women with breast cancer highly susceptible to depression. Depression in women with breast cancer leads to a reduction in mental energy, increased stress from the disease and its treatments, reduced immune function, reduced quality of doctor-patient relationship, decreased libido, and failure to comply with medical guidelines (6). On the other hand, in women with breast cancer, anxiety is one of the main mental problems. Anxiety in women with breast cancer may occur in five possible forms. Anxiety due to cancer diagnosis, treatment-related anxiety and its consequences, identity anxiety due to surgery and following auxiliary therapies, which patients may experience changes in their bodies that affect their perception of body and their sexual desire, and also affect their personal and social identity and their roles in motherhood, husbandry and work. Existence realistic anxiety pointing to these women's concerns about their future and their death, and their concern about the fate of their children and their loved ones after their death, and ultimately, these women may experience anxiety and fear of relapse (7). In women with breast cancer, untreated anxiety can lead to problems on symptom control, weakness in decision-making, poor compliance with therapeutic regimens, poor social interaction and disrupted quality of life. Depression and anxiety have a negative effect on performance status, quality of life, hospital stay and even the therapeutic outcome of patients with cancer, and evaluation and treatment of these two disorders is important in these patients. Sadness is a kind of natural feeling that occurs in response to unpleasant situations and unpleasant events. This is usually accompanied by anxiety, decreased body energy, general boredom and low sleep. Usually, events change, problems are solved, and these mood changes are resolved, but the continuity of sadness leads to depression and frustration that cannot escaped (8). By identifying the negative factors affecting the quality of life of patients with breast cancer (such as depression and anxiety), one can control and reduce the impact of life-threatening factors on the quality of life through psychological or psycho- medical interventions, thus improve the quality of life of these women. The group treatment is one of the most effective forms of intervention in the particular diseases of women with breast cancer. Studies have shown that psychological intervention programs, in particular those presented in a group form, significantly reduce the emotional distress associated with cancer, provide valuable social support, and increase

adaptive coping skills and cognitive group therapy is followed by the development of insight in the patient, the acquisition of new experiences in the group, establishing relationships with others, group cohesion, facilitating emotional depletion and increasing self-esteem in patients, and is preferred to individual treatments which have some limits including high cost, lack of qualified and trained therapists and allocation of a long time needed (9). According to the pathology of psychological problems, different group therapy approaches are suggested. One of these approaches is psychotherapy of the originality of existence. This approach is a kind of philosophy-based treatment. This treatment focuses on interpersonal and transpersonal dimensions of human beings. It attempts to question and achieve the worldview of a person. The pursuit of such a goal requires focusing on enlightenment and understanding of personal beliefs and values, and the discovery of manuscripts and unspoken ones. This approach seeks to enable a person to be more informed, more original, and more purposeful, and to accept the constraints and contradictions of human existence. The four main categories addressed in this approach are death, freedom, loneliness, and meaninglessness (10). The treatment of the originality of existence- humanism acts on the level between existence and humanism theory, and by emphasizing on concepts such as encounter and presence in the being, the choice, responsibility, freedom, value and meaning of life, is separated from other health schools. The core of the therapist's work is to focus on the presence of the references, that is, instead of having a judicious, critical, and interpretive attitude towards the individual, considers how he is present in full, honest and conscientious manner; that is, the therapist's attention is on the barriers of the presence of the references and considers it to be a resistance to destructive and stressful ways of life (11). But perhaps the most prominent feature of existential- humanistic psychotherapy, which in defining has been introduced as important from the view of some of its important figures, the emphasis of this approach is on therapeutic relationship and its role in causing intellectual, emotional, behavioral and communicative change of references. Kissan *et al*. (12) in a research found that existential cognitive therapy had a positive effect on the overall reduction of psychological distress in women with non-existent breast cancer. In another study, Kroos *et al*. (13) concluded that although cognitive-ontological group therapy does not affect the lifespan of these patients, it is very useful in reducing their psychological distress. The history of researches in Iran confirms that researches on women with breast cancer in Iran have less addressed the effectiveness of cognitive-ontological group therapies, and if interventions were conducted in this regard, it was about non-interventional effect of treatment effectiveness on one of the variables or studies. Therefore, considering the frequency of this disease in the country, the present study can help us to better understand the depression and anxiety of women with breast cancer (14, 15). In the same vein, the purpose of this study is to investigate the effectiveness of cognitive-ontological group therapy on depression and anxiety in cancer patients. The findings of the present study can be useful for health professionals, clinical and health psychologists, counselors and therapists who use psychological interventions on physical patients, especially patients with breast cancer.

Methods

Being regarded as an empirical research study, the present research is accounted as a type of experimental research design in nature (containing pre-test, post-test and follow-up with two groups of experiment and control). The statistical population of this study primarily consisted of 70 women suffering from breast cancer, aging 18 to 60 years old in spring 2016 who referred to Afzali Hospital in

Kerman, Iran to use therapeutic facilities (chemotherapy and radiotherapy). After the introduction of the program, 30 out of 70 patients who announced their readiness to participate in treatment sessions were randomly selected. Then, participants were randomly divided into two groups of 15 (15 patients in the control group and 15 in the experimental group). The criteria for putting the subjects in the experiment included being in the age range of 18 to 60 years, passing at least one year from the onset of the disease, staying in stages 1 to 3 of the disease, having at least cycle education, lack of brain lesions, mental retardation and hallucinations and active delusions. Before the intervention, members of both groups were assessed by Beck Depression Inventory and Beck Anxiety Inventory. The experimental group participated in 12 sessions of a 90- minute existential group therapy which was formed twice a week, while the control group did not receive any formal psychological social intervention as a waiting list, but after performing the post-test for the control group, the existential cognitive group therapy course was held. The general structure of the existential cognitive group therapy sessions, which was made by Behroozi (19), is shown in Table 1:

In this research, two questionnaires (beck depression questionnaire and beck anxiety inventory) were used. Beck depression questionnaire was first introduced by Beck in 1961, and was revised in 1971 and published in 1978. This test consists of a total of 21 articles related to different symptoms, and the subject is required to gradually grade the symptoms based on a scale of 0 to 3. The test is a type of self- test, and it takes 5 to 10 minutes to complete it. Having the ability to read at grade 5 or 6 is enough to understand the articles. Scores range from at least 0 to a maximum of 63. Normally, the score for depressed people clinically and non-patient maladaptive people lay in the range of 12 to 40. The cut score 18 correctly defines 92 % of patients with essential depression.

Table 1. General structure of sessions of existential cognitive group therapy

Instruction	Treatment steps	Sessions
Completion of the questionnaire, planning the formation of the group, introducing and acquaintance, introducing the model and logic of treatment, accountability, secrecy, and observing the scheduling of the sessions.	Phase I: Preparing members for participation in the group	First to Second
Confrontation with the existential concepts and their acceptance, such as: anxiety of death and the individual's perception of it rather than denial or distortion, loneliness anxiety and its acceptance rather than neurotic anxiety, such as extreme addiction or illness fears like staying alone in a single and closed environment. Challenge by losing meaning in life Challenging wrong beliefs like fate malignancy, negative destiny, penalty of sin, and so on.	Phase II: The main body of intervention	Third to ninth
Continuity of the process, reviewing goals, and establishing a new orientation in life. Constructing a commitment to work and follow continuously to achieve new goals and ultimately express feelings of patients themselves with general treatment, medical treatment staff and group therapists were terminated to sessions.	Third Stage: Exploring the sources of non-functional anxiety and preparing for ending the treatment group.	Tenth to Twelfth

The internal correlation coefficient of this test is between 0.73 and 0.93 with an average of 0.86. The coefficient of credit obtained from the retest is based on the interval between running times and the type of population in the range of 0.48 to 0.86. The result of evaluating content validity, synchronization and cleanliness and factor analysis has generally been desirable. Validity and reliability of this questionnaire were reviewed and proved respectively in the years 1971, 1979, and 1986. In many researches about depression in Iran, this questionnaire was used in the form of 13 items and 21 items, and the research results show that this test has a good validity and reliability. The Beck correlation coefficient with the Hamilton scale for depression was 0.73. In general, it can be said that the reliability and validity of this test were 0.75 and 0.90, respectively. Also the Beck Anxiety Inventory was created by Aaron T. Beck and his colleagues in 1988. The questionnaire has 21 items that list symptoms of anxiety and is more similar to the checklist. Beck Anxiety Inventory is designed to measure anxiety in adolescents and adults, and each of its articles is one of the common symptoms of anxiety, namely, mental symptoms, physical symptoms and panic. Studies show that this questionnaire has a high validity and reliability. Its internal consistency coefficient (alpha coefficient) is 0.92, its validity is 0.75 with a weekly retest method and the correlation of its articles varies from 0.30 to 0.76. Five types of content, synchronization, structure, diagnostic and factor validities have been measured for this test, which all indicate the high effectiveness of this tool in measuring the severity of anxiety (16). In the research of (16), its coefficient of internal consistency (alpha coefficient) is 0.92, its validity is 0.75 with a one-week rehearsal method and its articles' correlation is between 0.30 and 0.76. Five types of content, synchronization, structure, diagnostic and factor validities have been measured for this test, which all indicate the high effectiveness of this tool in measuring the severity of anxiety. To analyze the data, descriptive statistics including mean and standard deviation, and covariance analysis were used ($p \leq 0.05$). To investigate the results and findings of the research, the collected data were analyzed using SSPS software (Version 20).

Results

Table 2 shows the mean and standard deviation of the anxiety score in the experimental and control groups in two stages of pre-test and post-test.

As the information in Table 2 shows, the anxiety score of the subjects in the experimental group is with an average of 51.48 and a standard deviation of 5.31 at the pretest stage and with an average of 40. 71 and a standard deviation of 12.5 in the post- test phase. The anxiety score of the subjects in the control group was with an average of 50.87 and a standard deviation of 48.5 in the pretest stage and with a mean of 50.34 and a standard deviation of 5.51 in the post-test phase.

The depression score of the subjects in the experimental group is with an average of 38.48 and a standard deviation of 4.71 at the pretest stage and with an average of 37.22 and a standard deviation of 5.11 in the post-test phase. The depression score of the subjects in the control group is with an average of 24.31 and a standard deviation of 4.98 in the pretest stage and with a mean of 38.75 and a standard deviation of 5.42 in the post-test phase (Table 3). To indicate the normality of data distribution, Kolmogorov-Smirnov test was used. As shown in Table 4, the results of the Kolmogorov-Smirnov test were not significant, indicating a normal distribution of the pre-test variables. Table 3 shows that the distribution of the pre-test variables is normal. Covariance analysis is in fact a hierarchical regression analysis whose purpose is to eliminate the effects of some variables from dependent variables and then to analyze the variance of remaining scores (17). In this research, by means of pre-test statistical

control as auxiliary or coherent random variable, the mean scores of post-test of two groups are moderated. The results of covariance analysis of experimental and control groups in the anxiety variable are shown in Table 5. As seen in Table 4, the two groups had a significant difference in post-test with a ratio of F1.27=14.17 at the level of p <0.01, that is, after providing cognitive-ontological group training sessions to the patients affected to breast cancer in the experimental group, this group responded to the anxiety test questions significantly less than the control group. Therefore, the hypothesis of the study that "cognitive-ontological group training has an effect on the anxiety of patients with breast cancer" was accepted at a significant level of p=0.01.

The results of the covariance analysis of the experimental and control groups in the depression variable are shown in Table 6. As it is seen in Table 6, the two groups had a significant difference in post-test with a ratio of F1.27= 22.61, at p=0.01 level, that is, after providing cognitive-ontological group training to patients with breast cancer in the experimental group, this group responded to depression test questions significantly less than the control group. Therefore, the hypothesis of the study that "cognitive-ontological group training has an impact on the depression of patients with breast cancer" was accepted at a significant level of p=0.01.

Table 2. Description of the anxiety score in the experimental group and the control group

Variables	Stage	Mean	Standard deviation
Anxiety in experiment group	Pretest	51.48	5.31
	Post-test	40.71	5.12
Anxiety in control group	Pretest	50.87	5.48
	Post-test	50.34	5.51

Table 3. Description of the depression score in the experimental group and the control group

Variables	Stage	Mean	Standard deviation
Depression in experiment group	Pretest	38.48	4.71
	Post-test	37.22	5.11
Depression in control group	Pretest	24.31	4.98
	Post-test	38.75	5.42

Table 4. Results of Kolmogorov-Smirnov test in anxiety and depression variables

Variable	Z	P
Anxiety	0.72	0.21
Depression	0.83	0.31

Table 5. Comparison of inferential data of experimental and control groups using covariance analysis in anxiety variable

Resource changes	Total	Df	Mean squares	F	P
Pre-test	59.63	1	59.63	2.16	0.14
Groups	389.39	1	389.39	14.17	0.01
Error	741.69	27	27.48		

Table 6. Comparison of inferential data of experimental and control groups using covariance analysis in depression variable

Resource changes	Total	df	Mean squares	F	P
Pre-test	79.25	1	79.25	1.35	0.17
Groups	1319.51	1	1319.51	22.61	0.01
Error	1575.72	27	58.36		

Discussion

The purpose of this study was to evaluate the efficacy of cognitive-ontological group therapy on anxiety and depression in breast cancer patients. In the first hypothesis, the results showed that there was a significant difference between the groups in the anxiety variable in the post-test groups. In other words, it can be said that cognitive-ontological group therapy has an effect on the anxiety of patients with cancer. These results are consistent with the findings of (4, 18, 19, 20) In explaining these findings, it should be noted that patients with breast cancer have repressed and chronic feelings, and have high levels of anxiety and psychological stress both before and after diagnosis. Such patients need mental interventions, including encouragement for expressing feelings and communicating with them. The existing approaches in the existential group treatment are widespread in patients with cancer, and in particular, life-threatening diseases, due to religious- spiritual confrontations in cancer patients and the use of religious and spiritual resources in order to cope with the disease. Religious-spiritual coping may also serve multiple functions such as maintaining self-esteem, providing a sense of meaning and purpose, mental relaxation and sense of hope. In the opinion of the followers of this ism, if one wants to understand the basis of this philosophy, they should not expect to define it in any way. In their view, everything in this case is to be known to man, that is to say, they are of unity in relation to the subject and the issue of identification. In principle, the definition is not equal to the subject itself and the truth of the person is what is, not what they are called and because the philosophy of being is known with human and is related to whom, in fact, the definition of the philosophy is the definition of existence of a human. In their belief, the subject of identification is not, in principle, permissible in the form of the issue of identification. Given the fact that existentialists hold humanistic beliefs and also rely on human individuality, and what is emphasized in the humanism is the special attention of the person and respect for his human position, and this respect for the human position coupled with the view of human freedom and during which, the rules of interest in experiencing are emerged. All of these can lead to reduced anxiety and increased mental health in individuals. In the second hypothesis, the results showed that there was a significant difference between the groups in the depression variable in the post-test of groups. In other words, it can be said that cognitive-ontological group therapy affects the depression of patients with cancer. These results are consistent with the findings of (2, 19, 20, 21). In explaining these findings, it can be noted that in the process of cognitive-ontological or ontological therapy, three main tasks are identified: 1. Helping people referring to recognize that they are not fully present in their treatment process at present and to observe that how these patterns are able to deprive them out of treatment 2. Supporting people referring to face with anxieties they were avoiding 3. Helping people referring to redefine themselves and their world in such a way that they develop more originality about their lives. So, treatment is not removing depression in existentialism, rather therapists move along with patients and explore their

mental world by themselves, face with the horrible and worrying positions of their lives, and experience the world like them and in this experience, therapists will find out how to face their own choices and freedom and how to overcome their isolation, loneliness, and meaninglessness through creating meaning and search for value, and how to be an honest and trueborn individual with honesty and accepting their hidden aspects of their existential plight. In fact, the goal of existential therapy is to help clients to experience and address the basic concepts and issues of life they were escaping. Meaning has at least two uses in existentialism. First, it means a goal, and second means a spiritual spirit, such as religious beliefs. The lack of follow-up due to the time constraints is of other research constraints. The results of this research should be interpreted with caution, although it was tried to control variables and conditions as much as possible. It is suggested that in future studies, more accurate diagnostic scales based on semiotics and diagnostic criteria should be used to measure depression, anxiety and stress. As a practical proposal, it is recommended that in the specialized cancer treatment centers, to allocate a sector for providing psychological services, in particular, group therapy, and this form of study to be conducted on other types of cancer patients. In the end, the most important limitations of research is mentioned: the group therapy, despite all the benefits mentioned in this study, also suffers from this defect that does not focus on the unique aspects of the psychological problems of individuals and it's possible that some women with breast cancer will get intact during the process of group therapy and they will accede to the group treatment.

Conclusion

cognitive- existence realistic group therapy can reduce depression and anxiety in patients with breast cancer. From the point of view of existence, the genuine existence is honesty to nature, with others and ourselves. In their view, originality is rewarding, originality means that we have decided to face the world with smoothly and peeled, without hiding it from ourselves or hiding ourselves from it, which can reduce depression in people.

Ethical issues

No applicable.

Authors' contributions

All authors equally contributed to the writing and revision of this paper

References

1. Taylor E J. Transforming trajedy among women surviving breast cancer. Oncology Nursing Forum. 2013; 27: 721- 788.
2. Attarian, A. The Effectiveness of an existential- humanist group therapy on reducing death anxiety in mashhad patients. MSc. dissertation, Ferdowsi University. 2014.
3. Luckman Cramer C. Effectiveness of group cognitive- behavioral treatment and group therapy in depressed women in community clinics. Behaviour R Ther. 2013; 48 (11): 45- 63.
4. Heather M, Addie C, Anthony J. Effectiveness of cognitive behavioral intervention (CBT) on psycho-sexual adjustment for men with localized prostate cancer. J Psycho Oncology. 2013; 3 (4): 48-61.
5. Witt Sh, Robert MC, Sherry C. A comparison of death and quality of life patients with Advanced cancer or AIDS and their family caregiver. J Associ Nur IDS care. 2010; 21 (2): 99- 112.
6. World cancer Research Fund / American Institute for Cancer Research. Food Nartrition, Psysical Activity, and the prevention of cancer: a global perspective. Washington D.C. AICR. 2012.
7. Fann JR, Thomas-Rich AM, Katon WJ, Cowley D, Penning M, McGregor BA. Major depression after breast cancer: a review of epidemiology and treatment.

General Hospital Psych. 2008; 30: 112- 126.
8. Moyer A, Sohl SJ, Knapp-Oliver SK, Schneider S. Characteristics and methodological quality of 25 years of research investigating psychosocial interventions for cancer patients. Cancer Treat Rev. 2009; 35: 475- 484.
9. Tel H, Dogan S. Fatigue, anxiety and depression in cancer patients. Neur Psych Brain Res. 2011; 17: 42- 45.
10. Casellas A, Font A, Vives J. Positive psychology interventions in breast cancer. A systematic review. J Psycho Oncology. 2014; 23 (1): 9- 19.
11. Rahimian Boogar I. Clinical psychology of health prevention, formulation and treatment guide. Tehran: Dangeh Publishing. 2013.
12. Kissane D, Bloch S, Smith G, Miach P, Clarke D, Ikin J. Cognitive- existential group psychotherapy for women with primary breast cancer: A randomized controlled trial. Psycho Oncology. 2013; 12 (6): 532- 546.
13. Kross D, Love A, Hotton A, Bloch S, Smith G, Clarke D. Effect of cognitive existential group therapy on survival in early stage breast cancer. J Clin Oncol. 2012; 22 (21): 4255- 4260.
14. Moreira H, canavarro MC. A longitudinal study about the body image and psychosocial adjustment of breast cancer patient during the course of the disease. Eur J Oncology Nur. 2012; 14 (4): 263- 270.
15. Kerry K. Effect of cognitive- existential group therapy on survival in early- stage breast cancer. J Clin Oncology. 2009; 22: 4255- 4260.
16. Kaviani H, Mosavi A. Psychometric properties of Beck depression and anxiety inventory in the age and sex groups of Iranian population. J School Med. 2009; 66 (2): 126- 140.
17. Sarmad Z, Bazargan A, Hejazi E. Research methods in behavioral sciences. Agah publication: Tehran. 2009.
18. Procheska G, Norcross HW. Existential thought and therapeutic practice: An introduction to existential psychotherapy. London: STEGE publications. 2009.
19. Pedram M, Mohammadi M, Naziri G, Aeenparast N. The effectiveness of cognitive behavioral group therapy on anxiety, depression treatment and induce of hope in breast cancer women. Women & Society. 2009; 1: 61- 76.
20. Behroozi F. Comparison of the effectiveness of two methods of cognitive-behavioral and existence originality humanist group therapies on the self-esteem of mashhad prisoners. Thesis for obtaining master's degree, Ferdowsi niversity of Mashhad. 2012.
21. Parizadeh H. Comparison of the effectiveness of existential group therapy and group reality therapy on depression, anxiety, stress, tension, and solving the problem of body image of mastectomy women in mashhad. MSc thesis, Ferdowsi University. 2012.